

REPORT

OF THE

DEPARTMENT OF HEALTH

OF THE

PANAMA CANAL

FOR THE

MONTH OF MAY, 1914

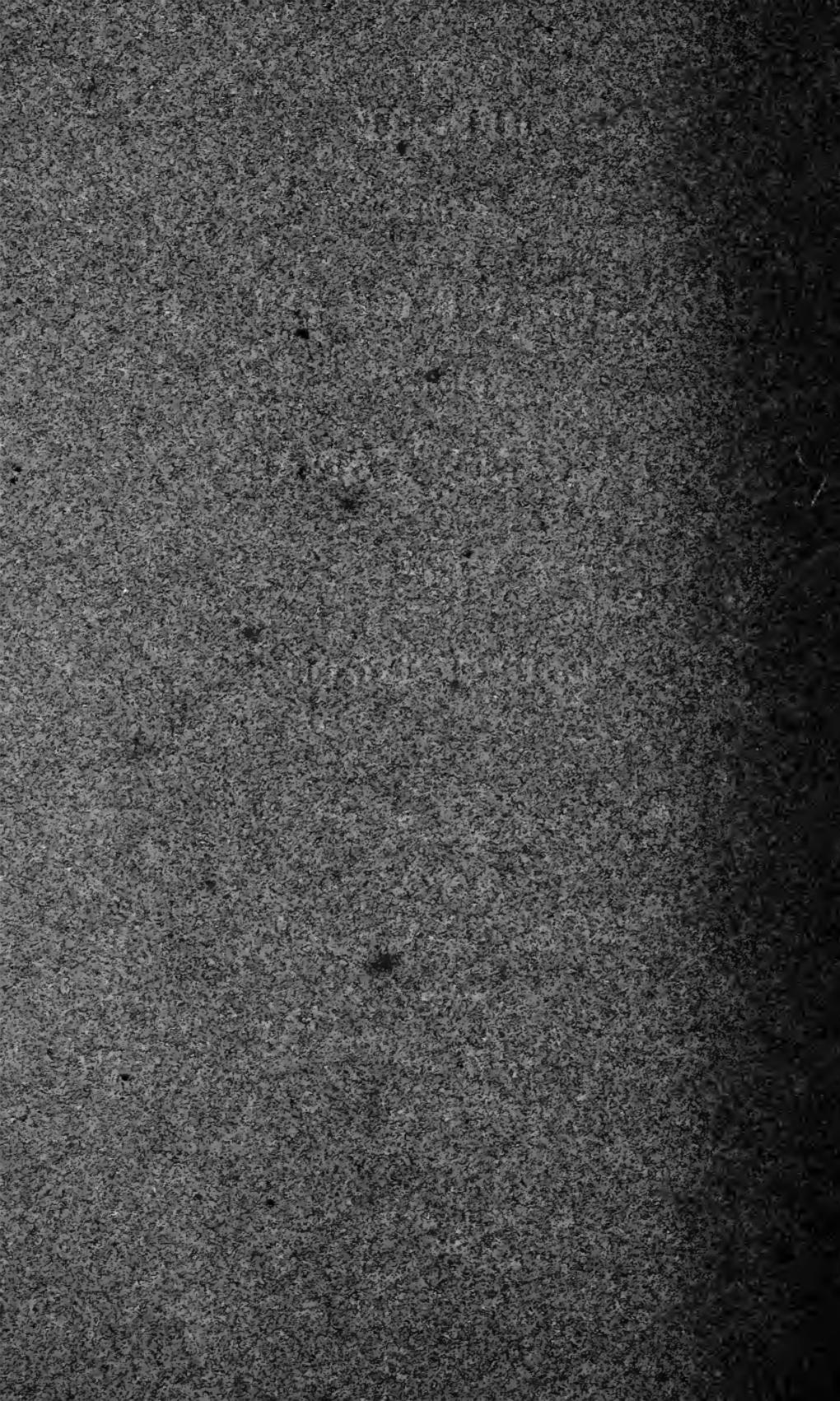
CHAS. F. MASON

Lieut. Colonel, Medical Corps, United States Army
Chief Health Officer, Ancon, Canal Zone

Gift of the Panama Canal Museum

WASHINGTON

1914.



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LETTER OF TRANSMITTAL.

THE PANAMA CANAL,
DEPARTMENT OF HEALTH,
Ancon, Canal Zone, June 10, 1914.

GOVERNOR OF THE PANAMA CANAL,
Culebra, Canal Zone.

SIR: I have the honor to submit the following report of the operations of the department of health for the month of May, 1914.

Very respectfully,

CHAS. F. MASON,
Chief Health Officer.

GENERAL REMARKS.

On April 1 the department was reorganized on a permanent basis for the operation of the Panama Canal. The name of the department was changed from "sanitary department" to the "department of health," the "chief sanitary officer" becoming the "chief health officer." The positions of assistant chief sanitary officer and chief sanitary inspector were abolished, the general inspector under the new organization performing all the duties heretofore belonging to the office of the chief sanitary inspector.

The positions of chief quarantine officer and health officer of Panama, heretofore held by one official, were separated. The chief quarantine officer becomes also the quarantine officer of Panama.

The accounting of the department of health and the cashier at Ancon Hospital were put under the jurisdiction of the auditor.

During the month of May the districts of Porto Bello and Toro Point were closed and the forces of the department of health withdrawn.

DIVISION OF HOSPITALS.

EMPLOYEES.

The health of the employees has continued good during the month. No cases of yellow fever, smallpox, or plague originated on or were brought to the Isthmus during the month. The number of names on the rolls for the preceding month was 48,039.

The total number of admissions to hospitals and quarters was 1,633, or a rate of 407.92 per thousand per annum, as compared with 350.59 for the preceding month, and 468.59 for the corresponding month of last year.

The total number of deaths from all causes was 39. Of these 23 died from disease, or 5.74 per thousand per annum, as compared with 5.52 for the preceding month, and 5.42 for the corresponding

month of last year. The diseases causing the largest number of deaths were as follows: Lobar pneumonia, 7; and tuberculosis, 6. No other disease caused more than one death.

The number of employees per thousand constantly sick was 11.65, compared with 12.07 for the preceding month, and 15.35 for the corresponding month of last year.

The admission rate to hospitals for malaria was 50 per thousand per annum, as compared with 36 for the preceding month, and 36 for the corresponding month of last year; 21 per cent of all admissions were due to this cause.

The next highest admission rate was due to diseases of the digestive system and the respiratory system, each having the same number of admissions, and the next to venereal diseases. These four classes of diseases caused 47 per cent of all admissions.

The discharge rate for typhoid fever per thousand per annum was 0.75, compared with 2.26 for the preceding month, and 1.20 for the corresponding period of last year.

EFFECTS OF RACE.

The admission and death rate for disease for black employees were 124.70 and 5.95 per thousand per annum, as compared with 393.37 and 4.66 for white employees. The noneffective rate for disease and injuries for black employees per thousand was 9.94, as compared with 20.55 for white employees.

The admission rate for malaria was 42.56 per thousand per annum for blacks as compared with 87.07 for whites.

The much higher admission and noneffective rates for whites as compared with blacks is no doubt due to the fact that the whites receive pay for 24 days per year while sick from disease, while the blacks do not.

DEPORTATIONS.

There were 16 deportations accomplished during the month, divided as follows: Employees, 15; nonemployees, 1; for disease, 8; and injury, 8.

CANAL ZONE.

The number of persons, white and colored, living in the Canal Zone is estimated at 54,755, among whom there were 70 deaths, giving a ratio of 15.34 per thousand per annum, as compared with 13.49 for the preceding month and 13.92 for the corresponding period of last year.

PANAMA CITY.

In Panama City, with an estimated population of 47,172, there were 145 deaths, giving a ratio of 36.89 per thousand per annum, compared with 32.82 for last month and 26.46 for the corresponding period of last year.

The higher death rate this year than last is largely due to the considerable emigration from the Canal Zone to Panama without any increase in the official population figures.

COLON.

In Colon, with an estimated population of 20,232, there were 58 deaths, giving a ratio of 34.40 per thousand per annum, as compared with 21.95 for the last month and 21.95 for the corresponding month of last year.

SANITATION.

CANAL ZONE.

The malarial rate showed an increase over that of last month, though it has not been a great one. It is accounted for by four principal factors: First, the completion of contract work at Cano Saddle and the liberation of approximately 3,000 malaria-infected laborers in the zone during March, April, and May; second, the extensive breeding area for anopheles on a hydraulic fill lying between Ancon, Balboa, and Corozal, which area could not be treated; third, a markedly increased rainfall during April and May; fourth, the fact, that through resignations, leaves, and sickness, the number of sanitary inspectors in the zone was rapidly reduced so far that the ordinary close supervision of sanitary routine and special work was for a time impossible. The highest rate of malarial incidence was in the week ending May 16, since which time it is again declining.

There were three cases of typhoid during the month, two of them in negro laborers (waiter and dishwasher) in two hotel kitchens. No secondary cases resulted so far as known.

The cutting of the banks of the Pedro Miguel River, as noted in the last report, was continued during the month, though lately much delayed and made very expensive by reason of heavy rains.

A special effort has been made during the month to clean up the very dirty negro towns and suburbs, such as Golden Green, Comacho Old Empire, New Gatun, etc., with resulting improvement in their appearance and their sanitary condition, though neither is yet satisfactory.

The weakest point in the antimalaria work here is the treatment of the human carrier. The common tendency for a large part of the population, principally negro, is to take treatment for malaria only when in hospital, occasions that are as rare and brief as possible. The consequence is that there are many gamete carriers, probably several thousand, at all times ready to infect any malaria bearing mosquitoes that bite them. An effort is being made to have employees, at least, continue treatment for at least a month. Thus far, however, the result has not been very much of a success.

Detailed statistics are shown in Table XVII.

PANAMA.

DEATHS.

One hundred and forty-five deaths from all causes are chargeable to the city of Panama. Of this number, 128 deaths were from disease and 17 deaths from violence. Fifty-two per cent of the total deaths from disease were among children under 5 years of age, and the cause of death in the vast majority of these cases was malnutrition. There were 18 stillbirths.

GARBAGE COLLECTION.

Night collection was started during the latter part of the month in the San Felipe district. This change from day to night service gave us the use of two extra teams during the day, which were needed for the satisfactory handling of the garbage in the more congested districts of the city. On account of the condition of the road leading to dump No. 1, we were compelled to abandon this dump, and dump No. 2 was started satisfactorily, but during the latter part of the month, we were gathering enough inflammable material in the city to cremate all garbage received at the dump before any fly breeding could take place.

During the coming month, the work of installing automatic self-closing covers on garbage cans will be started. The device adopted consists of a concrete base elevated about 3 inches above the surrounding surface and upon this base the can will be placed. The cover will be attached to the side of the building, the complete stand being located at a convenient point of access to the tenants of the building as well as the garbage collectors. This device will afford at all times, perfectly fitting covers for the garbage cans, and one source of food supply for rodents will be cut off.

RAT CATCHING.

The trapping of rats from different parts of the city has been continued during the month, a total of 489 rats having been trapped, the vast majority of which were turned over to the board of health laboratory for examination for bubonic plague. All examinations to date have been negative.

The wire cage trap and the spring trap, baited with cheese and cooked meat, have been used exclusively in this work, no poison bait having been placed. In certain buildings with concrete floors where there were evidences that the rats had worked their way through breaks under the floors, formaldehyde and potassium permanganate was used to drive the rats out and our men killed them as they emerged from their harboring places.

Each of the inspectors in the four districts in the city has one laborer who gives two hours of his time each day to placing and collecting traps. Enough rats are caught to determine if plague is present among them. These rats come from all parts of the city and when sent to the laboratory are tagged, showing the locality in which they were secured.

FLY BREEDING.

Fly breeding in the city of Panama is still extensive, especially in those localities where stables are located. The majority of stables in the city are in a very bad state of repair and no permits for repairs will be given until the question of segregating the stables is settled. It has been the custom of the stable owners to give away all the manure from the stables to be used as fertilizer on the potereros and gardens near the city. Under section No. 66 of the sanitary rules and regulations, this office has directed that the manure from all stables be collected at least once in every 24 hours and taken to the dump to be cremated there. These orders are

being complied with and fly breeding in and around the stables has been reduced. Fly eradication work is being carried on in all parts of the city. The congested tenement districts are receiving special attention and it has been necessary to cause the arrest of several property owners for maintaining insanitary conditions on their premises, in which fly breeding was found. The population of these districts is more or less a floating one, and insanitary conditions are to be expected with greater frequency than in the more settled sections of the city.

Three Bath fly traps have been placed in the public market, in the fish section where flies are most numerous. The bait used to attract the flies was sirup, honey, etc., the idea being to give the flies a different bait from that to which they were accustomed. The traps have been successful in catching large numbers of flies, and additional traps will be placed throughout the market when they can be secured.

STREET CLEANING.

All the streets in the city have been cleaned twice a day except on Sundays and holidays, when the street men worked only half a day. The hours of work for the street men have been increased from 9 to 10 on the principal streets where the traffic is heavy. Under the old schedule there was a period from 11 a. m. to 12.30 p. m. when no street sweeping was done, and it is during this time that the traffic was heaviest on certain streets. Under the present schedule, there is only half an hour, from 12 noon to 12.30 p. m., when the street men are not at work. This change has enabled us to keep the streets freer from débris than formerly. A rotary brush street-cleaning machine has been requisitioned, and when it is placed in commission it is thought that some of the gangs now using brooms can be dispensed with and a saving in the cost of the work effected.

An index of the traffic taken at fairly active points shows as follows:

On the corner of Fifteenth Street and North Avenue, from 8.10 a. m. to 9.10 a. m. there were 335 traffic movements of all kinds. This street is 30 feet wide.

At Thirteenth Street and Central Avenue, from 10 a. m. to 11 a. m. there were 600 traffic movements. The street at this point is 26 feet wide.

At Caledonia Bridge near M Street in one hour there were 700 traffic movements. The street at this point is 26 feet wide.

The above figures show, in a measure, the difficulties that we experience in keeping the streets clean during the active hours. The general traffic conditions of the city could be greatly improved by an ordinance regulating the traffic. Under the present system all kinds of vehicles are allowed on all streets at all hours of the day, and as the traffic is far too great to be easily accommodated on the narrow streets, some arrangement should be made restricting the wagon traffic to less-used streets. This could be easily accomplished without causing inconvenience to the traffic.

The regulation of this office, recently issued, requiring all occupants of buildings fronting on the sidewalks to keep the sidewalks in a cleanly condition at all times, is being complied with by all persons concerned.

As shown in the report, 145 buildings were condemned during the month, of which number 39 were demolished as being a menace to public health and safety. One hundred and forty-eight permits were issued for repairs to buildings.

All repairs to buildings as well as new buildings under construction are supervised by an inspector who gives special attention to the rat proofing of all buildings.

VACCINATIONS.

During the month there were 2,820 vaccinations performed. The total since April 1, when the work started, amounts to 3,065. The work so far has been confined to school children, but will be extended so as to include all unvaccinated persons in the city as well as those who have not been vaccinated within the past five years. A check of the vaccinations performed shows that about 85 per cent are successful. No infections have been found or reported among those vaccinated.

INFECTIOUS DISEASES.

Four cases of typhoid fever were reported during the month. Two of these cases originated away from the Isthmus. In both cases the patients were sailors, and were not reported sick till they reached the Isthmus. One other case was reported as clinical typhoid. This leaves only one positive typhoid case originating in Panama during the month.

Detailed statistics are shown in Table XVII.

COLON.

The following new work has been inaugurated during the month:

A systematic inspection and examination of milk offered for sale in the city of Colon, and of cattle and beef slaughtered.

Out of 962 school children examined, 400 were vaccinated, the balance being found to be protected against smallpox.

Arrangements were made to have examinations for diagnostic purposes made for the local physicians, by the board of health laboratory, free of charge.

Steps were taken for the segregation of small craft and providing beach accommodations for same by an agreement between the Panama Government and the Panama Railroad Co.

An arrangement was made between the alcalde and the health office whereby police patrolmen will aid in enforcement of certain important sections of the sanitary code.

The department has been active in the enforcement of those sections of the sanitary code relating to rat-proof building and wharf construction and extermination of rats by trapping and poisoning.

Installation of the new sewer system for use of the residents of Colon Beach made upon the recommendation of this office to correct insanitary conditions.

Detailed statistics are shown in Table XVII.

QUARANTINE SERVICE.

No diseases of a quarantinable nature have been received at any of the stations during the month. The plague situation to the south remains about the same.

Alleged cases of plague at Colombian ports on the Atlantic side have proved to be negative.

The plague situation at Habana, Cuba, has shown no material change, and in all probability Habana will remain infected for a long time.

Detailed statistics are shown in Table XVIII.

ANCON HOSPITAL.

A board has been appointed to prepare plans and specifications for the erection of a permanent hospital on the sites of the old frame buildings now in use for Ancon Hospital. It is proposed that the new buildings shall be constructed of concrete and tiles and gradually replace the present structures as they wear out in use.

BOARD OF HEALTH LABORATORY.

The laboratory has continued to do valuable work. Cultures and inoculations were made from a plague suspect taken from a ship at Balboa quarantine, with negative results.

Dr. Samuel T. Darling, chief of laboratory, was sent to Colombia, at the request of the Colombian Government, to investigate a suspected outbreak of pneumonic plague at Cartagena and Barranquilla. Cable information has been received from him that the disease referred to was lobar pneumonia and not plague.

The study of the bionomics of local ticks has been continued.

Further experimental work to determine the transmitting agent in the local type of piroplasmosis has been done.

A study of the large joints in all cases coming to autopsy has been made with special reference to punched-out areas or erosions in the cartilaginous plates and their relation to venereal diseases, senility, and occupation.

Routine observations have been made on placental smears with the idea of determining their value in diagnosing latent malaria.

Observations have been made on the incidence and any interrelation of gall stones, gastro-duodenal ulcers, and pancreatitis in negroes coming to autopsy, with special reference to those cases without evidence of clinical manifestations.

An investigation of the irregularities in the electrolytic determination of copper in the presence of ethyl alcohol has been made.

A new method for the determination of minute quantities of water in oils has been established.

A study of the action of the different constituents of the atmosphere upon larvacide when it is allowed to stand exposed to their action has been commenced.

An organism recovered from a caseous cervical gland of a Balboa rat has been worked out. It has been demonstrated that small amounts of carbolic acid in the amboceptor and alboline in the patient's serum do not influence the final results in the Wassermann reaction.

FARM FOR THE DISABLED.

Good work continues to be done at the farm. The yield has increased and the per capita cost of caring for the disabled shows a steady decrease.

About 10 acres of ground were plowed; 8 acres were planted out to corn, about 4 acres to sorghum and kafir corn, 2 acres to yucca, 2 to yams, and 3 acres to vegetables and plants. One thousand five hundred plants were shipped to Mr. W. L. Phillips, landscape architect, Balboa, for Balboa townsite. Banana plants were cultivated and tended; some repairs made to fences, and in addition some other miscellaneous work done.

The number of patients (cripples) on June 1 was 51, two of whom were on leave; also, 30 insane patients, in charge of one nurse and and two attendants.

INSANE DEPARTMENT AT FARM.

On April 24 an insane colony was established at the Corozal farm. At first 15 men were selected for the purpose and the experiment proved so satisfactory that the number has been increased to 30. It is expected that this experiment will prove very beneficial to the patients themselves and will also furnish a valuable source of obtaining labor for the farm.

Detailed hospital statistics will be found in Table XIII.

COLON HOSPITAL.

It having been decided to abandon the present Colon Hospital and build a permanent emergency hospital in Cristobal, a board was appointed to select a suitable site and to make plans and specifications for the erection of the same. The board has not yet reported.

During the month an arrangement was made with the Panama Government by which the citizens of Colon could be admitted to Colon Hospital for treatment, either as private pay patients or as Panama Government cases. Except for this purpose the hospital continues for emergency cases only

CHRONIC DEPARTMENT.

There were 27 chronic and incurable patients constantly cared for during the month.

Detailed hospital statistics will be found in Table XIV.*

PALO SECO LEPER ASYLUM.

Conditions continued as usual at this asylum. The number of patients at the end of the month was 49, divided as follows: Adult males, 31; adult females, 11; male children, 4; female children, 3; whites, 5; and colored, 44.

Detailed statistics are shown in Table XV.

SANTO TOMAS HOSPITAL.

During the month a total of 1,216 cases were treated, an increase over the previous month of 124, with a total of 11,223 hospital days, as compared with 9,989 days for the previous month. During the month of May an average of 360 patients per day were treated, and on May 28 the hospital census showed 393 patients in the wards. Our capacity has been taxed somewhat as we can care for about 400 patients per day. Our subsistence cost remains approximately the same, at 27 cents United States currency per day, while our per capita cost was 86 cents United States currency per day.

The deaths during the month were 60, the same as the previous month, while the births numbered 90, as compared with 87 for the previous month.

Malaria is the predominant disease treated, followed by syphilis, bronchitis, tuberculosis, and pneumonia in their order.

Among the diseases causing death, pulmonary tuberculosis is predominant, followed by lobar pneumonia, traumatism, dysentery, and nephritis.

During the month there has been one case of typhoid fever, a notable decrease over the previous month, one of leprosy, one of scarlet fever, and one of pellagra treated.

The nurses' home has been completed and is now occupied and the quarters to be used by the pupil nurses are being put in condition. The general condition of the hospital buildings is good, and such repairs as are necessary are being made.

Detailed statistics are shown in Table XVI.

SICK CAMPS.

The only sick camp remaining in use at the end of the month was a small one for prisoners at the Gamboa penitentiary, and this will be treated hereafter as a dispensary.

DISTRICT DISPENSARIES.

At the end of the month we had 11 still in operation. The district having the largest admission rate for malaria was Corozal with an average weekly percentage of 0.45; that having the lowest admission rate for malaria was Gatun, with a percentage of 0.04.

Detailed statistics are shown in Table IX.

VITAL STATISTICS.

TABLE I.—DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD.

Color.	Number of em- ployees.	Deaths from—			Annual average for 1,000.		
		Disease.	Viol- ence.	All causes.	Disease.	Viol- ence.	All causes.
White.....	7,718	3	7	10	4.66	10.88	15.54
Colored.....	40,321	20	9	29	5.95	2.68	8.63
Total.....	48,039	23	16	39	5.74	4.00	9.74

DEATHS IN THE CITIES OF PANAMA AND COLON, AND THE CANAL ZONE.

Place.	Population.	Deaths.	Annual average per 1,000.
Panama.....	47,172	145	36.89
Colon.....	20,232	58	34.40
Canal Zone.....	54,755	70	15.34
Total.....	122,159	273	26.82

NOTE.—The figures relating to the number of employees are compiled from the pay rolls for the preceding month.

The population and deaths as given for the cities of Panama and Colon, and the Canal Zone, include employees and civil population.

TABLE II.—DEATHS BY AGE, COLOR AND SEX.

Age.	White.			Colored.			Yellow.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	6	4	10	44	32	76	.....	.....	.....	50	36	86
1 to 4 years.....	2	2	4	8	5	13	1	1	1	11	7	18
5 to 10 years.....	1	.....	1	4	2	6	.....	.....	.....	5	2	7
11 to 20 years.....	2	1	3	3	4	7	.....	.....	.....	5	5	10
21 to 30 years.....	7	1	8	32	16	48	1	1	1	40	17	57
31 to 40 years.....	5	1	6	24	5	29	1	1	1	30	6	36
41 to 50 years.....	3	.....	3	12	5	17	1	1	1	16	5	21
51 to 60 years.....	6	.....	6	6	4	10	.....	.....	.....	12	4	16
61 to 70 years.....	1	1	1	3	4	7	.....	.....	.....	1	4	5
71 to 80 years.....	.....	.....	.....	1	1	2	.....	.....	.....	1	1	1
81 to 90 years.....	1	1	1	.....	1	1	.....	.....	.....	1	1	2
Not stated.....	1	.....	1	12	1	13	.....	.....	.....	13	1	14
Total.....	33	11	44	147	78	225	4	4	4	184	89	273

TABLE III.—DEATHS BY NATIONALITY.

Nations.	Employees.	Non-employees.	Totals.
Africa.....		2	2
Antigua.....	2	1	3
Barbados.....	9	22	31
China.....		4	4
Colombia.....	1	7	8
Ecuador.....	1		1
England.....		1	1
France.....		1	1
Greece.....	1		1
Grenada.....		1	1
Guadeloupe.....		3	3
India.....		1	1
Jamaica.....	14	41	55
Martinique.....	1	11	12
Mexico.....		1	1
Montserrat.....		1	1
Panama.....		116	116
Santo Domingo.....		1	1
Salvador.....	1	1	2
Spain.....	1	3	4
St. Lucia.....		5	5
Sweden.....	1		1
Trinidad.....		2	2
United States.....	5	4	9
Venezuela.....		2	2
West Indies.....		1	1
Unknown.....	2	2	4
Total.....	39	234	273

TABLE IV.—DEATH RATE AMONG AMERICANS ON THE Isthmus CONNECTED WITH THE PANAMA CANAL.

Nationality.	Cases.	Cause of death.	Number of deaths.	Annual average per 1,000.
White employees from the United States.	6,047	Disease.....	1	1.98
		Violence.....	4	7.94
		All causes.....	5	9.92
White women and children from the United States.	4,503	Disease.....		
		Violence.....		
		All causes.....		
White employees and their families from the United States.	10,550	Disease.....	1	1.14
		Violence.....	4	4.55
		All causes.....	5	5.69
Total number of Americans on the Canal Zone.	12,352	Disease.....	1	.97
		Violence.....	5	4.85
		All causes.....	6	5.82

TABLE V.—CAUSES OF DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD.

Causes of death.	White.	Colored.	Total.
DISEASE.			
Acute alcoholism.....	1		1
Arteriosclerosis.....		1	1
Chronic nephritis.....		1	1
Clinical dysentery.....		1	1
Diphtheria.....		1	1
Ill-defined.....	1		1
Intestinal obstruction.....		1	1
Lobar pneumonia.....		7	7
Organic disease of heart.....		1	1
Other diseases of stomach.....		1	1
Purulent infection and septicemia.....		1	1
Tuberculosis, acute miliary.....		1	1
Tuberculosis, disseminated.....		2	2
Tuberculosis of the lungs.....	1	2	3
VIOLENCE.			
Accidental drowning.....	3	6	9
Electric shock.....	3		
Homicide by other means.....		1	1
Railroad traumatism.....	1	2	3
Total.....	10	29	39

TABLE VI.—CAUSES AND PLACES OF DEATHS OF EMPLOYEES AND CIVIL POPULATION.

Disease.	Ancon Hospital.	Colon Hospital.	Panama.	Colon.	Canal Zone.	Total.
<i>General diseases.</i>						
Malaria.....				2	2	1
Malarial fever, estivo-autumnal.....			1	1	2	4
Diphtheria and croup.....	1					1
Dysentery.....			4			4
Dysentery, entamoebic.....	1					1
Dysentery, unclassified.....	1					1
Purulent infection and septicemia.....	1					1
Septicemia.....	1					1
Tetanus.....	1		1			2
Pellagra.....			2			2
Tuberculosis.....	4		18	3	2	27
Acute miliary tuberculosis.....	1					1
Pott's disease.....			1			1
Tuberculosis of the larynx.....			1			1
Disseminated tuberculosis.....	8					8
Cancer and other malignant tumors of the peritoneum, intestines, and rectum.....		1				1
Cancer and other malignant tumors of the female genital organs.....			1	1		2
Cancer and other malignant tumors of other organs and of organs not specified.....				1		1
Acute articular rheumatism.....			1			1
Scurvy.....	1					1
Hlorosis.....			1			1
Alcoholism (acute or chronic).....	1					1
Alcoholism, acute.....	1					1
Alcoholism, chronic.....				1		1

TABLE VI.—CAUSES AND PLACES OF DEATHS OF EMPLOYEES AND CIVIL POPULATION—Continued.

Disease.	Ancon Hospi- tal.	Colon Hospi- tal.	Pana- ma.	Colon.	Canal Zone.	Total.
<i>Diseases of the nervous system and of the organs of special sense.</i>						
Encephalitis.....	1		1			2
Simple meningitis.....		1	1			2
Cerebrospinal fever.....			1			1
Cerebral hemorrhage, apoplexy.....				3		4
Epilepsy.....					1	1
Convulsions of infants (under 5 years of age).....			1			1
Other diseases of the nervous system.....	1					1
<i>Diseases of the circulatory system.</i>						
Acute endocarditis.....			1			1
Organic diseases of the heart.....	3	1	4	3		11
Arterio-sclerosis.....	1		2			3
Embolism and thrombosis.....			2			2
Hemorrhage; other diseases of the circulatory system.....			1			1
<i>Diseases of the respiratory system.</i>						
Acute bronchitis.....				2	1	3
Chronic bronchitis.....			1			1
Broncho-pneumonia.....			4	1	3	8
Pneumonia (unqualified).....			6			6
Lobar pneumonia.....	7	2	3	1	2	15
Pleurisy.....	1					1
Pulmonary congestion, pulmonary apoplexy.....			1			1
<i>Diseases of the digestive system.</i>						
Stomatitis.....					1	1
Other diseases of the stomach (cancer excepted).....					1	1
Acute gastritis.....					1	1
Chronic gastritis.....				2		2
Diarrhea and enteritis (under two years).....	1		28	2	6	37
Colitis.....			3			3
Hernia, intestinal obstructions.....		2				2
Intestinal obstruction.....	1					1
Other diseases of the intestines.....	1					1
Other diseases of the liver.....			1			1
Abscess of liver (unqualified).....			1			1
Simple peritonitis (nonpuerperal).....			1	1	1	3
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>						
Acute nephritis.....	1		4	1		6
Bright's disease (chronic nephritis).....	1	1	4			6
Pyelo-nephrosis.....					1	1
<i>The puerperal state.</i>						
Puerperal hemorrhage.....		1		2		1
Eclampsia.....						2

TABLE VI.—CAUSES AND PLACES OF DEATHS OF EMPLOYEES AND CIVIL POPULATION—Continued.

Disease.	Ancon Hospital.	Colon Hospital.	Panama.	Colon.	Canal Zone.	Total.
<i>Diseases of the skin and of the cellular tissue.</i>						
Acute abscess.....			1			1
<i>Diseases of the bones and of the organs of locomotion.</i>						
Osteomyelitis.....			1			1
<i>Diseases of early infancy.</i>						
Premature birth.....			4		1	5
Congenital debility.....	1			4	1	6
Malnutrition.....			8	3	3	14
Other causes peculiar to early infancy (including various consequences of labor).....			1			1
<i>Old age.</i>						
Senility.....			1			1
<i>Affections produced by external causes.</i>						
Suicide by firearms.....			2			2
Suicide by cutting or piercing instruments.....					1	1
Burns (conflagration excepted).....			1			1
Accidental drowning.....					10	10
Traumatism by other crushings (vehicles, railroads, landslides, etc.).....			3			3
Railroad traumatism.....	2				1	3
Dynamite traumatism.....			9			9
Starvation.....	1					1
Electricity (lightning excepted).....	1				2	3
Homicide by cutting or piercing instruments.....				1		1
Homicide by other means.....		1				1
<i>Ill-defined diseases.</i>						
Ill-defined organic disease.....	1					1
Sudden death.....					1	1
Cause of death not specified or ill-defined.....					1	1
Infections of undetermined origin.....	1					1
Total.....	49	9	139	32	44	273
Stillbirths.....	1	1	18	3	8	31
Grand total.....	50	10	157	35	52	304



TABLE VII.—SHOWING DISCHARGES AND DEATHS IN THE HOS

Diseases.	Ancon Hospital.							
	Employees.				Nonemployees.			
	Discharged.		Died.		Discharged.		Died.	
	W.	B.	W.	B.	W.	B.	W.	B.
<i>General diseases.</i>								
Typhoid fever.....	2				1	1		
Malaria fever, estivo-autumnal.....	19	46			26	7		
Malaria fever, tertian.....	8	14			8	3		
Malaria fever, quartan.....		1				1		
Malaria fever, clinical.....	26	75			25	12		
Measles.....						1		
Scarlet fever.....	2							
Diphtheria and croup.....				1				
Influenza.....	20					6		
Dysentery, entamoebic.....		1				1		1
Dysentery, bacillary.....						1		
Dysentery, unclassified.....		2		1		1		
Mumps.....						1		
Hemoglobinuric fever, unqualified.....	1	2						
Purulent infection and septicemia.....				1				
Septicemia.....								1
Tetanus.....								1
Pellagra.....		1						
Tuberculosis of the lungs.....	3		2	2	2	2		2
Acute miliary tuberculosis.....			1					
Abdominal tuberculosis.....		1					1	
Tuberculosis of other organs.....						1		
Tuberculosis of the skin.....						1		
Tuberculosis of the lymph glands.....							1	
Disseminated tuberculosis.....			2		2	2		6
Syphilis:								
Secondary.....	2	3			7	1		
Tertiary.....					4	3		
Period not stated.....		16			9	3		
Gonorrhea.....	9	15			15	1		
Gonorrhreal arthritis.....		3				2		
Gonorrhreal bubo.....		2						
Gonorrhreal orchitis and epididymitis.....	1	1			1			
Gonorrhreal ophthalmia.....					1	2		
Soft chancre.....	4	15			4			
Adenitis, chancroidal.....	3	1						
Cancer and other malignant tumors of the peritoneum, intestines, rectum.....								1
Other tumors (tumors of the female genital organs excepted).....							1	
Acute articular rheumatism.....					2			
Scurvy.....								1
Anæmia secondary, cause not determined.....	1				2			
Purpura hemorrhagica.....						1		
Alcoholism (acute or chronic).....			1			3		
Alcoholism, acute.....						2		1

PITALS OF THE PANAMA CANAL FOR THE MONTH OF MAY, 1914.

TABLE VII.—SHOWING DISCHARGES AND DEATHS IN THE HOSPITALS

Diseases.	Ancon Hospital.							
	Employees.				Nonemployees.			
	Discharged.		Died.		Discharged.		Died.	
	W.	B.	W.	B.	W.	B.	W.	B.
<i>Diseases of the nervous system and of the organs of special sense.</i>								
Encephalitis.....								1
Simple meningitis.....								
Other forms of mental alienation.....		1			4	13		
Epilepsy.....	1	1			1			
Convulsions of infants (under 5 years of age).....					1			
Hysteria.....					1			
Neuralgia.....	1	1						
Other diseases of the nervous system.....								1
Neurasthenia.....	2				2			
Diseases of the eyes and their annexa.....	9	14			11	7		
Diseases of the ears.....	4	2			8	1		
<i>Diseases of the circulatory system.</i>								
Pericarditis.....		1						
Organic diseases of the heart.....	1	2			3	2	1	2
Aneurysm.....					1			
Arterio-sclerosis.....					1		2	
Hemorrhoids.....	6	3			4			
Varicocele.....	1				2			
Lymphadenitis (nonvenereal).....	4	3			8			
<i>Diseases of the respiratory system.</i>								
Diseases of the nasal fossæ.....	3				4	2		
Diseases of the larynx.....		1						
Diseases of the thyroid body.....		1						
Acute bronchitis.....	11	23			5	2		
Chronic bronchitis.....		1						
Broncho-pneumonia.....		1			2			
Pneumonia (unqualified).....					1			
Lobar pneumonia.....	1	15			7	1	1	
Pleurisy.....	2	14			2			1
Empyema.....	1							
Asthma.....	1	2			2			
Abscess of lungs.....	1							
<i>Diseases of the digestive system.</i>								
Diseases of the teeth and gums.....	1	2						
Diseases of the pharynx.....	10	5			27	3		
Follicular tonsillitis.....		1			1		1	
Foreign body in the esophagus.....		1			1			
Ulcer of the stomach.....	4				1			
Other diseases of the stomach (cancer excepted).....	1	3						
Acute gastritis.....	1							
Chronic gastritis.....					1		1	
Acute indigestion.....		1			1		1	

OF THE PANAMA CANAL FOR THE MONTH OF MAY, 1914—Contd.

TABLE VII.—SHOWING DISCHARGES AND DEATHS IN THE HOSPITALS

Diseases.	Anecon Hospital.							
	Employees.				Nonemployees.			
	Discharged.		Died.		Discharged.		Died.	
	W.	B.	W.	B.	W.	B.	W.	B.
<i>Diseases of the digestive system—Contd.</i>								
Diarrhea and enteritis (under 2 years)					6	5		
Diarrhea and enteritis (2 years and over)	5	2			3	2		1
Colitis			4		1			
Ankylostomiasis	1	4					1	
Ascariasis					1			
Acute appendicitis	4	2			8			
Chronic appendicitis	1				10			
Inguinal hernia	6	6			2	1		
Other hernias						1		
Intestinal obstruction							1	
Other diseases of the intestines	9	2			16	1		1
Constipation	2				2			
Diseases of the liver			2		1			
Abscess of liver (unqualified)	1				1			
Cholecystitis	1						1	
Simple peritonitis (nonpuerperal)					1	1		
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>								
Acute nephritis		1						
Bright's disease (chronic nephritis)	2	2			1	5	3	1
Other diseases of the kidney and annexa			1					
Pyelonephrosis	1				2			
Calculi of the urinary passages	1							
Diseases of the bladder	1						1	
Cystitis	1	1					1	
Diseases of the urethra, urinary abscess, etc			2			3		
Stricture of the urethra, nonvenereal	3	5					1	
Chronic prostatitis					1			
Nonvenereal diseases of the male genital organs			1	3		3	2	
Hydrocele	1	4						
Uterine hemorrhage (nonpuerperal)					2			
Uterine tumor (nongenital)					1	2		
Other diseases of the uterus					5	7		
Salpingitis and other diseases of the female genital organs							3	
Nonpuerperal diseases of the breast (cancer excepted)			1				2	
<i>The puerperal state.</i>								
Normal labor					8	3		
Accidents of pregnancy					4			
Hyperemesis gravidarum					2	2		
Other accidents of labor					3			

OF THE PANAMA CANAL FOR THE MONTH OF MAY, 1914—Contd.

TABLE VII.—SHOWING DISCHARGES AND DEATHS IN THE HOSPITALS

Diseases.	Ancon Hospital.							
	Employees.				Nonemployees.			
	Discharged.		Died.		Discharged.		Died.	
	W.	B.	W.	B.	W.	B.	W.	B.
<i>Diseases of the skin and of the cellular tissue.</i>								
Furuncle.....	7	1				1		
Carbuncle.....						1		
Acute abscess.....	2	4				2	1	
Phlegmon and cellulitis.....	3	5				2	1	
Scabies.....							1	
Dhobie itch.....	2					2	1	
Ulcer of the skin.....		8					2	
Impetigo contagiosa.....	1					1		
In-growing nail.....	1					1		
Other diseases of the skin and annexa.....	3	3				5		
<i>Diseases of the bones and of the organs of locomotion.</i>								
Diseases of the bones (tuberculosis excepted).....	4	2				3		
Caries (nontuberculous).....	1							
Periostitis.....								
Ankylosis.....								
Arthritis.....	1					2		
Amputations.....		1						
Other diseases of the organs of locomotion.....	2	5						
<i>Diseases of early infancy.</i>								
Newborn child.....						9	4	
Premature birth.....						2	1	1
Malnutrition.....						1	1	
<i>Affections produced by external causes.</i>								
Poisoning by food.....	1	1				3		
Other acute poisonings.....						1		
Burns (conflagration excepted).....	1	7				2		
Traumatism:								
By firearms.....		2						
By cutting or piercing instruments.....		17				1	1	
By fall.....		15						
In mines and quarries.....		2						
By machines.....	1	6						
By other crushings (vehicles, railroads, landslides, etc.).....		2						
Railroad.....		6		2				
Electricity (lightning excepted).....	1		1					
Fractures (cause not specified).....	4	14				10		
Dislocations.....		2				1		
Sprains.....	5	1				2	1	
Other external violence.....	45	126				10	6	
<i>Ill-defined diseases.</i>								
Cause of death not specified or ill defined.....								1
Infections of undetermined origin.....	2	2				3		1
No disease.....	1	2				13	3	
Total.....	294	576	2	19	387	142	3	25

OF THE PANAMA CANAL FOR THE MONTH OF MAY, 1914—Contd.

Colon Hospital.								Total.							
Employees.				Nonemployees.				Employees.				Nonemployees.			
Discharged.		Died.		Discharged.		Died.		Discharged.		Died.		Discharged.		Died.	
W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.
2								9	1			1			
								2	4			2	1		
								3	5			2	1		
								2				2	1		
1								1	8			1	2		
								1				1			
								3	3			5			
								4	2			3			
								1		1					
1								1				2			
								1							
2	2			1				2	3			1			
								2	5						
				1	2							10	6		1
												2	1	1	
								1	1			3			
								1	9			1	2		
1	4			1	1	1		1	21			1	2	2	
1	2			1				1	17			1			
									2						
								1	8						
2	8				1			2	10			2		1	
								6							
								1		1					
1								5	14			10			
									2			1			
								5	1			2	1		
								45	126			10	6		
								2	2			3			1
								1	2			13	3		
21	43	0	3	12	11	1	5	315	619	2	22	399	153	4	30

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT.

Hospitals.	Re- main- ing May 1.		Ad- mit- ted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing May 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
<i>Ancon Hospital.</i>												
Employees.....	124	328	286	573	2	19	293	576	5	3	110	303
Nonemployees.....	144	87	426	154	3	19	386	130	1	4	180	88
Insane (employees).....	7	27	1	5			1				7	32
Insane (nonemployees).....	24	250	1	15		6	1	12	1	4	23	243
Total.....	299	692	714	747	5	44	681	718	7	11	320	666
<i>Colon Hospital.</i>												
Employees.....	4	26	28	54	....	3	21	43	3	8	8	26
Nonemployees.....	7	2	20	20	1	5	11	10	4	1	11	6
Total.....	11	28	48	74	1	8	32	53	7	9	19	32
<i>Palo Seco Leper Asylum.</i>												
Nonemployees.....	4	45	1	....	1	....	....	....	....	....	4	45
<i>Grand total.</i>												
Employees.....	128	354	314	627	2	22	314	619	8	11	118	329
Nonemployees.....	155	134	447	174	5	24	397	140	5	5	195	139
Insane (employees).....	7	27	1	5	....	1	....	....	....	....	7	32
Insane (nonemployees).....	24	250	1	15	....	6	1	12	1	4	23	243
Total.....	314	765	763	821	7	52	713	771	14	20	343	743

TABLE IX.—CONSOLIDATED REPORT OF CASES TREATED A DISPENSARIES.

Stations.	Employees.			Nonemployees.			Total.		
	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.
Naos Island.....	121	1,294	1,415	.....	.....	.....	121	1,294	1,415
Ancon.....	576	1,874	2,450	187	217	404	763	2,091	2,854
Balboa.....	3,178	3,467	6,645	91	118	209	3,269	3,585	6,854
Corozal.....	1,766	1,565	3,331	528	56	584	2,294	1,621	3,915
Pedro Miguel.....	478	1,053	1,531	317	73	390	795	1,126	1,921
Paraiso.....	596	1,282	1,878	201	292	493	797	1,574	2,371
Culebra.....	498	1,441	1,939	336	493	829	834	1,934	2,768
Empire.....	1,047	1,213	2,260	472	374	846	1,519	1,587	3,106
Gamboa.....	104	363	467	.....	.....	.....	104	363	467
Gatun.....	708	1,390	2,098	580	478	1,058	1,288	1,868	3,156
Cristobal.....	818	2,413	3,231	490	346	836	1,308	2,759	4,067
Toro Point.....	207	435	642	22	48	70	229	483	712
Margarita Point.....	50	422	472	.....	.....	.....	50	422	472
Total.....	10,147	18,212	28,359	3,224	2,495	5,719	13,371	20,707	34,078

CONSOLIDATED REPORT OF EMPLOYEES SICK IN QUARTERS.

Stations.	Days excused for quarters.			New patients excused for quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Naos Island.....	3	48	51	1	37	38
Ancon.....	99	111	210	56	29	85
Balboa.....	142	29	171	66	9	75
Corozal.....	199	1	200	98	1	99
Pedro Miguel.....	34	.....	34	20	.....	20
Paraiso.....	28	.....	28	15	.....	15
Culebra.....	42	163	205	17	74	91
Empire.....	131	38	169	41	14	55
Gatun.....	70	63	133	37	23	60
Cristobal.....	149	376	525	64	95	159
Toro Point.....	2	3	5	2	2	4
Margarita Point.....	.....	7	7	.....	4	4
Total.....	899	839	1,738	417	288	705

	White.	Colored.	Total.
Total admissions to hospitals.....	765	763	1,528
Number of employees sick in quarters.....	417	288	705
Total.....	1,182	1,051	2,233
Less number of patients transferred from hospitals to hospitals, whose admissions are duplicated in above figures.....	14	20	34
Net admissions to hospitals, and those sick in quarters.....	1,168	1,031	2,199
Net admissions of employees to hospitals, and those sick in quarters.....	724	909	1,633
Annual average per thousand of admissions of employees to hospitals, and those sick in quarters.....	1,125.68	270.53	407.92

TABLE X.—AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
<i>Hospitals.</i>			
Ancon Hospital.....	121.29	349.96	471.25
Colon Hospital.....	8.32	24.00	32.32
Total.....	129.61	373.96	503.57
<i>Quarters.</i>			
Naos Island.....	.10	1.55	1.65
Ancon.....	3.19	3.58	6.77
Balboa.....	4.58	.94	5.52
Corozal.....	6.42	.03	6.45
Pedro Miguel.....	1.10	-----	1.10
Paraiso.....	.90	-----	.90
Culebra.....	1.35	5.26	6.61
Empire.....	4.23	1.22	5.45
Gatun.....	2.26	2.03	4.29
Cristobal.....	4.81	12.13	16.94
Toro Point.....	.06	.10	.16
Margarita Point.....	-----	.23	.23
Total.....	29.00	27.07	56.07
Average number of employees constantly sick:			
White.....	129.61	29.00	158.61
Colored.....	373.96	27.07	401.03
Total.....	503.57	56.07	559.64
Average number of employees constantly sick per 1,000:			
White.....	16.79	3.76	20.55
Colored.....	9.27	.67	9.94
Total.....	10.48	1.17	11.65

TABLE XI.—AVERAGE NUMBER OF DAYS' TREATMENT PER EMPLOYEE IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
<i>Hospitals.</i>			
Ancon Hospital.....	12.69	14.58	13.94
Colon Hospital.....	10.00	12.81	11.94
<i>Quarters.</i>			
Naos Island.....	3.00	1.30	1.34
Ancon.....	1.77	3.83	2.47
Balboa.....	2.15	3.22	2.28
Corozal.....	2.03	1.00	2.02
Pedro Miguel.....	1.70	-----	1.70
Paraiso.....	1.87	-----	1.87
Culebra.....	2.47	2.20	2.25
Empire.....	3.20	2.71	3.07
Gatun.....	1.89	2.73	2.22
Cristobal.....	2.33	3.96	3.30
Toro Point.....	1.00	1.50	1.25
Margarita Point.....	-----	1.75	1.75

TABLE XII.—SUBSISTENCE AND OPERATING EXPENSES.

	Hospitals.
<i>Subsistence expenses.</i>	
Number of days' rations issued patients.....	34,563
Cost of rations issued to patients.....	\$8,288.21
Cost of subsistence per patient per day.....	\$0.239
<i>Operating expenses.</i>	
Number of days' relief furnished patients.....	34,563
Cost of operation.....	\$42,189.70
Cost per capita per day.....	\$1.22
Cost of operation with amount received from outside patients deducted.....	\$27,529.59
Cost per capita per day with above deduction.....	\$0.80
Cost of dispensaries.....	\$6,164.50

TABLE XIII.—REPORT OF ANCON HOSPITAL.

Class.	Remain-ing Apr. 30, 1914.		Ad-mitted.		Died.		Dis-charged.		Trans-ferred.		Remain-ing May 31, 1914.	
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.
Panama Canal em-ployees.....	117	277	243	465	2	13	264	493	5	2	89	234
Panama Railroad em-ployees.....	7	51	43	108	—	6	29	83	—	1	21	69
Pay patients.....	129	77	398	134	2	12	363	109	—	4	162	86
Charity patients.....	15	10	28	20	1	7	23	21	1	—	18	2
Insane employees.....	7	27	1	5	—	—	1	—	—	—	7	32
Insane nonemployees	24	250	1	15	—	6	1	12	1	4	23	243
Total.....	299	692	714	747	5	44	681	718	7	11	320	666
	991		1,461		49		1,399		18		986	

Transfers:

8 to Colon Hospital (4 white, Panama Canal; 2 black, Panama Canal; 1 black, Panama Railroad; 1 white, charity).

5 to asylum from hospital (1 white, Panama Canal; 4 black, pay).

5 to hospital from asylum (1 white, nonemployee; 4 black, nonemployees).

	White.	Black.	Total.
Total number of employees died, discharged, and transferred.....	301	598	899
Total number of days' treatment for same since ad-mission.....	3,822	8,719	12,541
Average number of days' treatment for each em-ployee.....	12.69	14.58	13.94
Average number of employees constantly sick.....	121.29	349.96	471.25

Cost of subsistence, per patient, per day, \$0.24311.

NATIONALITY.

Class.	Total number treated.	Americans.		Other na- tions.	
		W.	B.	W.	B.
Panama Canal employees.....	1,102	208	3	152	739
Panama Railroad employees.....	209	22	—	28	159
Pay patients.....	738	414	—	113	211
Charity patients.....	73	38	—	5	30
Insane employees.....	40	4	—	4	32
Insane nonemployees.....	290	6	—	19	265
Total.....	2,452	692	3	321	1,436

Ancon Hospital, June 5, 1914.

WARD LABORATORY REPORT.

Blood examinations.....	1,144
Estivo-autumnal.....	124
Quartan.....	5
Tertian.....	25
Differential counts.....	76
Hemoglobin estimations.....	148
Leucocyte counts.....	200
Red blood counts.....	4
Stool examinations.....	979
Ameba.....	1
Ascaris lumbricoides.....	37
Balantidium coli.....	1
Cercomonas intestinalis.....	1
Ciliated monads.....	29
Entameba (<i>histolytica</i> and <i>tetragena</i>).....	7
Guaiac test.....	6
Pus and blood.....	115
Strongyloides.....	53
Tricecocephalus dispar.....	93
Uncinaria (ova).....	115
Urine examinations.....	2,072
Albumen.....	641
Casts.....	522
Epithelia.....	180
Guaiac tests.....	12
Indican.....	2
Pus and blood.....	495
Sugar (positive 6).....	33
Trichomonas vaginalis.....	1
Sputum examinations.....	193
Positive for tubercle bacilli.....	26
Smear examinations.....	24
Urethral (1 positive for gonococci).....	12
Vaginal (1 positive for gonococci).....	3
Eye (positive for gonococci).....	3
Chancre (<i>Treponema pallida</i>).....	6

REPORT OF SURGICAL OPERATIONS.

	Number.	Died.
Amputations:		
Thigh.....	1	
Digits, multiple.....	3	
Arm and leg.....	1	1
Operations on bones:		
Craniectomy, decompressive.....	1	
Fractures, simple.....	11	
Fractures, compound.....	2	
Adenectomy:		
Cervical.....	1	
Inguinal, single.....	27	
Inguinal, double.....	8	
Femoral.....	1	
Herniotomy:		
Inguinal, single.....	12	
Inguinal, double.....	4	
Ventral.....	1	
Strangulated.....	1	
Genito-urinary tract:		
Ureterotomy.....	1	
Urethrotomy, internal.....	1	
Urethrotomy, external.....	4	
Varicocele, radical cure.....	3	
Hydrocele, single, radical cure.....	5	
Hydrocele, double, radical cure.....	1	
Epididymotomy.....	7	
Amputation of scrotum.....	1	
Curettage uteri.....	7	
Perineoplasty.....	2	
Trachelorrhaphy.....	4	
Obstetrical:		
Perineorrhaphy.....	2	
Thorax:		
Thoracotomy.....	2	
Rectum:		
Hemorrhoids, radical cure.....	12	
Fistula in anus, excision of.....	1	
General:		
Throideectomy.....	1	
Varicose veins, excision of.....	1	
Plastic operation for effects of disease.....	1	
Skin graft.....	1	
Laparotomy:		
For general peritonitis (not traumatic or appendicial).....	1	
For intestinal obstruction.....	1	1
Entero-enterostomy.....	1	
Appendectomy.....	19	
Appendectomy, with local peritonitis.....	3	
Colostomy.....	1	
Cholecystostomy.....	2	
Supravaginal hysterectomy.....	2	
Hysteromyomectomy.....	3	
Suspensio-uteri.....	4	
Plastic operation for chronic pelvic peritonitis.....	6	
Major operations, various other.....	2	
Minor operations, various.....	180	
Total.....	356	3

REPORT OF EYE AND EAR DEPARTMENT.

Surgical operations.

Adenoidectomy.....	7
Capsulectomy.....	1
Cataract extraction.....	1
Enucleation.....	1
Glaucoma, trephine.....	1
Iridectomy.....	2
Iridectomy, optical.....	1
Pterygium excision.....	1
Removal of foreign body from esophagus.....	1
Rhino plastic.....	1
Sequestrotomy.....	1
Sinusotomy, radical, frontal.....	1
Sinusotomy, simple, frontal.....	1
Submucous resection.....	5
Tonsillectomy.....	21
Trachoma, expression.....	1
Turbinatectomy.....	2
	— 49
Various minor operations:	
Ear.....	13
Eye.....	32
Nose.....	1
Throat.....	15
	— 61
Total.....	110
Total number of outside cases treated.....	871
Refractions.....	112

OUT-PATIENT DEPARTMENT.

Clinic.	Total visits.	New cases.	Pay cases.	Prescriptions.
Medical.....	371	278	55	388
Surgical.....	412	234	19	102
Eye and ear.....	871	344	31	391
Total.....	1,654	756	105	881

REPORT OF THE BOARD OF HEALTH LABORATORY.

Bacteriological examinations of—		Pathological tissues prepared, par-
Blood cultures.....	21	affin.....
Throat cultures.....	14	426
Urine cultures.....	49	Chemical analysis of—
Stool cultures.....	27	Hospital dairy milk.....
Pus.....	3	Milk from private dairies sup-
Cultures from autopsies.....	7	plying Panama and Colon.....
Spinal fluid.....	3	Oil, transformer-room.....
Knee fluid.....	1	Monel metal, transmission line.....
Fluid from chest.....	1	Pyrene (fire extinguisher).....
Smears from throat.....	1	Urine.....
Smears from eyes.....	1	Surgical tissues and neoplasms re-
Cultures from eyes.....	1	ported.....
Tap water.....	2	Autopsies performed.....
Autogenous vaccines prepared.....	5	Bodies embalmed.....
Antityphoid vaccinations.....	6	Animals examined or under obser-
Wassermann reactions.....	275	vation.....
Agglutination reactions.....	8	Leper suspects examined.....
		Rats examined.....
		953

HOSPITAL FARM, COROZAL.

Expenditures, May, 1914:		Products sold, May, 1914:	
Supervision and office.....	\$200.00	3,347 heads lettuce.....	\$74.33
Labor.....	489.08	261 pounds lettuce.....	19.87
Subsistence of labor.....	365.86	2,850 pounds yucca.....	62.65
Quartermaster team service.....	120.42	28 pounds tomatoes.....	2.80
Electric lights.....	3.90	2,392 pounds papayas.....	50.95
Ice.....	1.20	58 pounds sweet peppers.....	5.16
Material and supplies.....	21.56	21 pounds egg plant.....	1.02
		628 bunches radishes.....	27.88
	1,202.02	72 bunches parsley.....	3.20
Transfer and services rendered.....	59.25	357 dozen eggs.....	144.59
		32½ dozen roses.....	19.25
Products sold.....	1,142.77	10,003 mangoes.....	176.64
	748.55	9 pineapples.....	1.01
Net expenditures.....	394.22	35 guinea pigs.....	17.50
Net cost per patient per day.....	.26	2 hogs.....	75.00
		51 loads gr ss.....	51.00
		Pasturage.....	15.70
		Total.....	748.55

TABLE XIV.—REPORT OF COLON HOSPITAL.

	Re-		Ad-		Died.		Dis-		Trans-		Re-	
	main-	first	mit-	ad-	W.	B.	W.	B.	W.	B.	mit-	end of
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.
Panama Canal employees.....	4	14	21	27	....	2	18	25	1	3	6	11
Panama Railroad employees.....	12	7	7	27	....	1	3	18	2	5	2	15
Pay (private).....	5	—	13	11	1	1	8	8	2	—	7	2
Pay (municipal).....	1	3	7	—	2	—	1	1	1	1	2	4
Zone charity.....	2	1	4	2	....	2	3	1	1	—	2	—
	11	28	48	74	1	8	32	53	7	9	19	32

Transferred to Ancon: One white, Panama Canal; 3 black, Panama Canal; 2 white, Panama Railroad; 5 black, Panama Railroad; 2 white, pay; 1 white, Zone. Transferred to Santo Tomas: One white, pay (municipal); 1 black, pay (municipal); total, 16.

	White.	Black.	Total.
Total number of employees died, discharged, or transferred.....	24	54	78
Total number of days' treatment for same since admission.....	240	692	932
Average number of days' treatment for each employee.....	10.00	12.81	11.94
Average number of employees constantly sick.....	8.32	24.00	32.32

Cost of subsistence per patient per day, 25 cents.

NATIONALITY.

	White Ameri- can.	White foreign.	Black.	Total.
Panama Canal employees.....	5	20	41	66
Panama Railroad employees.....	2	5	39	46
Pay (private).....	4	14	11	29
Pay (municipal).....		3	8	11
Zone charity.....	3	3	3	9
	14	45	102	161

LABORATORY REPORT.

Blood examinations.....	72
Estivo-autumnal.....	16
White blood counts.....	14
Hemoglobin estimations.....	23
Stool examinations.....	37
Uncinaria.....	12
Strongyloides.....	2
Ascaris.....	3
Tricocephalus dispar.....	5
Ciliated monads.....	3
Epithelia.....	1
Urine examinations.....	46
Albumen.....	14
Casts.....	26
Pus.....	8
Epithelia.....	7
Sputum examinations.....	6
Negative.....	6

SURGICAL OPERATIONS.

Amputations:	
Digits, multiple.....	2
Herniotomy:	
Strangulated (died, 1).....	2
Genito-urinary tract:	
Cystotomy.....	1
Obstetrical:	
Cæsarian section, abdominal (died, 1).....	1
Low forceps.....	1
Perineorrhaphy.....	2
General:	
Plastic operation for severe injuries.....	1
Skin graft.....	1
Laparotomy:	
Minor operations, various.....	12

OPERATIONS EYE, EAR, NOSE, AND THROAT.

Tonsillectomy, double.....	2
Minor operations.....	2
Out-patients treated.....	111
Refractions.....	2

TABLE XV.—REPORT OF PALO SECO LEPER ASYLUM.

Class.	Re- main- ing, first of month.		Ad- mitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing, end of month.	
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.
Panama Canal employees.....												
Panama Railroad employees.....												
Pay cases.....	2	31	11	.....	1	.....					2	31
Charity cases.....	2	14	.....	.....							2	14
Total.....	4	45	1	.....	1	.....					4	45

¹ From Santo Tomas Hospital.

NATIONALITY.

Class.	Number treated.		Americans.		Other nations.	
	White.	Black.	White.	Black.	White.	Black.
Panama Canal employees.....						
Panama Railroad employees.....						
Pay cases.....	2	31				
Charity cases.....	2	14				
Total.....	4	45				

Cost of subsistence per patient per day, 23 cents.

TABLE XVI.—SANTO TOMAS HOSPITAL.

Class.	Remaining May 1.	Admitted.	Dis- charged.	Died.	Remaining May 31.
Pay cases.....	36	140	118	6	52
Charity cases.....	309	731	653	54	333
Total.....	345	871	771	60	385

Average number of patients constantly sick.....	360
Total number of days' treatment.....	11,223
Average number of days' treatment per patient.....	9
Cost of subsistence per patient per day.....	\$0.27

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Pay cases.....	176			81	95
Charity cases.....	1,040			107	933
Total.....	1,216			188	1,028

DISPENSARY REPORT.

Class.	White.	Colored.	Total.
Natives.....	61	298	359
Foreigners.....	53	229	282
Total.....	114	527	641

DISEASES TREATED.

Typhoid fever.....	1	Lobar pneumonia.....	24
Malaria.....	66	Asthma.....	1
Malarial fever, estivo-autumnal.....	27	Diarrhea and enteritis (two years and over).....	14
Malarial fever, tertian.....	6	Intestinal parasites.....	16
Malarial fever, clinical.....	51	Appendicitis and typhlitis.....	12
Scarlet fever.....	1	Other diseases of the intestines.....	14
Influenza.....	4	Cirrhosis of the liver.....	3
Dysentery.....	10	Simple peritonitis (nonpuerperal).....	1
Leprosy.....	1	Other diseases of the digestive system (cancer and tuberculosis excepted).....	12
Erysipelas.....	1	Acute nephritis.....	3
Purulent infection and septicemia.....	12	Diseases of the bladder.....	10
Tetanus.....	2	Diseases of the prostate.....	4
Pellagra.....	1	Other diseases of the uterus.....	9
Tuberculosis of the lungs.....	30	Salpingitis and other diseases of the female genital organs.....	3
Syphilis.....	42	Normal labor.....	76
Gonorrhcea.....	18	Accidents of pregnancy.....	13
Cancer and other malignant tumors of the breast.....	7	Abortion.....	10
Anemia, chlorosis.....	1	Extra-uterine pregnancy.....	1
Alcoholism (acute or chronic).....	11	Furuncle.....	1
Simple meningitis.....	1	Acute abscess.....	19
Other forms of mental alienation.....	3	Diseases of the skin and adnexa.....	19
Epilepsy.....	4	Other diseases of the organs of locomotion.....	4
Other diseases of the nervous system.....	2	Newborn child.....	69
Diseases of the eyes and their adnexa.....	3	Congenital debility.....	1
Acute endocarditis.....	9	Burns (conflagration excepted).....	2
Arterio-sclerosis.....	8	Traumatism by other crushings (vehicles, railroads, landslides, etc.).....	36
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	2	Fractures (cause not specified).....	10
Hemorrhoids.....	1	No disease.....	82
Hemorrhage; other diseases of the circulatory system.....	3	Total.....	830
Laryngitis.....	1		
Chronic bronchitis.....	32		

SURGICAL OPERATIONS.

	Number.	Died.
Wiring of fractures, compound.....	1	
Adenectomy, axillary.....	2	
Adenectomy, inguinal, single.....	1	
Adenectomy, inguinal, double.....	3	
Herniotomy, inguinal, single.....	8	
Herniotomy, strangulated.....	1	
Herniotomy, ventral.....	1	
Urethrotomy, internal.....	3	
Urethrotomy, external.....	1	1
Hydrocele, single, radical cure.....	1	
Orchidectomy.....	1	
Epididymotomy.....	1	
Vasectomy.....	1	
Amputation of penis.....	1	
Curetage uteri.....	2	
Vaginal sections.....	1	
Vaginal punctures.....	1	
Hemorrhoids, radical cure.....	2	
Fistula in anus, excision of.....	1	
Stab wound of soft parts, operation for.....	1	
Plastic operation for congenital defect.....	9	
Plastic operation for severe injuries.....	1	
Plastic operation for effects of disease.....	18	
Laparotomy, exploratory.....	1	1
Appendectomy.....	2	
Appendectomy with general peritonitis.....	1	1
Abscess of liver, laparo-hepatotomy for.....	1	
Pan-hysterectomy.....	2	
Salpingectomy, single.....	1	
Salpingectomy, double.....	2	
Salpingo-oophorectomy.....	3	
Oophorectomy.....	2	
Suspensio-uteri.....	2	
For ectopic gestation.....	1	1
Major operations, various other.....	1	
Total.....	81	4

TABLE XVII.—SANITARY WORK IN CANAL ZONE, PANAMA, AND COLON.

The following is a summary of sanitary work performed and material expended during the month in the Canal Zone:

Work requests on quartermaster's department:	
Grass cutting.....	10
Screening.....	15
Miscellaneous.....	13
Work requests on engineering department.....	30
Work requests on other departments.....	1
Notices served to abate nuisances.....	137
Arrests for violation of sanitary regulations.....	6
Convictions.....	4
Building permits approved.....	5
Inspections of closets.....	2,273
Inspections of stores.....	298
Inspections of restaurants.....	77
Inspections of shops.....	199
Garbage cans emptied.....	132,366
Closets disinfected.....	5,344
Houses disinfected.....	2
Rat traps used daily.....	1,298
Adult anopheles destroyed in houses.....	5,094
Adult culicines destroyed in houses.....	20,213
Larvacide used.....	gallons. 4,197
Crude oil used.....	do. 24,888
Rats destroyed.....	815

Following is a summary of routine work done by the health office, Panama, during May, 1914:

Mosquito work:

Linear feet of ditches cleaned and maintained.....	24,500
Cubic yards earth used in filling.....	30
Gallons larvacide used.....	519
Square yards pools oiled.....	58,845
Water containers treated.....	50,556
Mosquito breeding places found.....	1,400
Fly breeding places found.....	1,110

Garbage collections:

Loads garbage from yards removed to dump.....	4,921
Loads garbage from cans removed to dump.....	4,346
Total cans garbage emptied.....	99,541

Buildings:

Buildings inspected.....	8,209
Plans for new buildings approved.....	30
Permits granted for repairs to old buildings.....	148
Buildings condemned.....	145
Buildings demolished.....	39

Street cleaning:

Average number of square yards streets cleaned daily.....	600,000
Average number square yards streets sprinkled daily.....	100,000
Private properties cleaned during month.....	10
Notices served and nuisances abated.....	45

Vaccinations:

Vaccinations during month.....	2,820
Vaccinations since Apr. 1, 1914.....	3,065

COLON.

[Including Cristobal, Mount Hope, and Toro Point.]

COLON.

General sanitation:

Square yards streets cleaned.....	4,073,226
Square yards alleys maintained.....	688,371
Loads garbage, cubic yards.....	449
Private properties cleaned.....	105
Rats killed.....	68
Cans garbage.....	67,028
Cubic yards garbage.....	2,105
Linear feet ditches maintained.....	1,564
Square yards vegetation removed.....	72,900
Square yards oiled.....	15,300
Receptacles treated.....	24,900
Mosquito breeding places destroyed.....	106
Fly breeding places destroyed.....	142
Buildings inspected.....	3,650
Notices served and nuisances abated.....	239

(Colon and Cristobal garbage disposed at Ninth Street dump, Colon).

Buildings:

Plans approved.....	2
Permits to repair issued.....	58
Permits to occupy issued.....	2
Sewers (reported by division of municipal engineering):	
New connections made during month.....	3
Total connections made to date.....	1,145
Houses in which extensions were made.....	1
Outstanding permits.....	61

CRISTOBAL.

Sanitation:

Square yards pools oiled.....	3,000
Water containers treated.....	3,670
Mosquitoes killed in barracks (anopheles, 648; culices, 1,740).....	2,388
Mosquitoes killed in ears (anopheles, 1,689; culices, 496).....	2,185
Mosquito breeding places destroyed.....	13
Fly breeding places destroyed.....	18
Buildings inspected.....	360

MOUNT HOPE.

Sanitation:

Square yards oiled.....	11,600
Receptacles treated.....	29,150
Mosquito breeding places destroyed.....	273
Cubic yards ditches constructed (open).....	108
Linear yards ditches maintained (open).....	17,986

TORO POINT.

Sanitation:

Square yards oiled.....	6,150
Number of mosquitoes killed (anopheles, 658; culices, 377).....	1,035
Yards ditches maintained (open).....	2,922
Doses quinine issued.....	1,170

TABLE XVIII.—QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA AND PANAMA FOR THE MONTH OF MAY, 1914.

Vessels inspected and passed.....	14
Vessels inspected and held in quarantine.....	12
Total vessels inspected.....	26
Vessels fumigated on arrival.....	11
Crew examined.....	1,820
Passengers from foreign ports examined and landed:	
Cabin.....	573
Steerage.....	138
	711
Total persons examined.....	2,531
Persons vaccinated at ports of arrival because of compulsory vaccination law.....	15
Persons vaccinated at ports of departure or en route because of compulsory vaccination law.....	737
Total persons vaccinated.....	752
Persons held in quarantine at the detention house to complete period of incubation for fever or plague.....	169
Persons held in quarantine on board vessels to complete period of incubation of yellow fever or plague.....	1,641
Total persons held under observation.....	1,810
Persons embarked for foreign ports:	
Cabin.....	340
Steerage.....	149
	489
Persons arriving from coast towns in small launches and sailing craft.....	2,233
Persons sailing for coast towns in small launches and sailing craft.....	2,077
Number of bills of health issued.....	29
Number of certificates issued to outgoing passengers.....	21
Number of certificates refused on account of trachoma.....	2
Total persons landed.....	2,944
Total persons sailing.....	2,566
Apparent increase for the month.....	378
QUARANTINE TRANSACTIONS AT THE PORTS OF COLON AND CRISTOBAL FOR THE MONTH OF MAY, 1914.	
Vessels inspected and passed.....	106
Vessels fumigated on departure.....	5
Pieces of baggage handled and stored.....	102
Crew inspected.....	9,558
Passengers inspected.....	5,575
Total persons inspected.....	15,133
Persons vaccinated in port on arrival.....	675
Persons vaccinated in ports of departure or en route.....	692
Total persons vaccinated.....	1,367

Persons detained in quarantine to complete period of incubation for yellow fever and plague.....	268
Persons detained on vessels.....	202
	470
Total persons held under observation.....	470
Total persons landed from foreign ports:	
Cabin.....	1,754
Steerage.....	1,802
	3,556
Total persons embarked for foreign ports:	
Cabin.....	2,109
Steerage.....	2,305
	4,414
Persons in transit.....	1,544
Persons from coast towns (inspected).....	475
Persons from coast towns (not inspected).....	294
Persons leaving Colon for coast towns.....	271
Persons landed during month:	
For immigration report.....	4,019
For Pacific ports.....	306
	4,325
Bills of health issued.....	9
Bills of health vised.....	25
Persons recommended for deportation.....	2
Certificates issued to outgoing passengers.....	6
Persons refused certificates on account of trachoma.....	2
Total persons landed.....	4,325
Less number for Pacific ports.....	306
	4,019
Total persons sailing.....	4,635
Apparent decrease for month.....	666
CONSOLIDATED REPORT OF QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA AND PANAMA AND COLON AND CRISTOBAL FOR THE MONTH OF MAY, 1914.	
Vessels inspected and passed.....	120
Vessels held in quarantine.....	12
	132
Total vessels entered.....	
Vessels fumigated on arrival.....	11
Vessels fumigated on departure.....	5
	16
Total vessels fumigated.....	
Pieces of baggage handled and stored.....	102
Crew examined.....	11,378
Passengers examined.....	6,286
	17,664
Total persons examined.....	
Persons vaccinated at ports of arrival because of compulsory vaccination law.....	690
Persons vaccinated at ports of departure or en route because of compulsory vaccination law.....	1,429
	2,119
Total persons vaccinated.....	
Persons held in quarantine at the detention houses to complete period of incubation of yellow fever and plague.....	437
Persons held in quarantine on board vessels to complete period of incubation of yellow fever and plague.....	1,843
	2,280
Total persons held under observation.....	
Total persons landed from foreign ports:	
Cabin.....	2,327
Steerage.....	1,940
	4,267
Total persons embarked for foreign ports:	
Cabin.....	2,449
Steerage.....	2,454
	4,903

Total persons arriving from coast towns on small launches and sailing craft.....	3,002
Total persons sailing for coast towns on small launches and sailing craft.....	2,348
Apparent increase for month from coast towns.....	654
Apparent decrease for month from foreign ports:	
Cabin.....	122
Steerage.....	514
	636
Immigrants recommended for deportation.....	2
Certificates issued to outgoing passengers.....	27
Persons refused certificates on account of trachoma.....	4
Bills of health issued or viséed.....	63
Total persons landed.....	7,269
Less number for Pacific ports.....	306
Total persons sailing.....	6,963
	7,251
Total apparent decrease for month.....	288

IMMIGRATION REPORT FOR COLON.

From—	Cabin.	Steerage.
Europe.....	53	21
United States.....	960	69
Jamaica and West Indies.....	225	1,307
Venezuela.....	58	12
Colombia.....	65	48
Cuba.....	27	41
Guatemala.....	22	121
Costa Rica.....	127	94
Bocas del Toro.....	113	362
Coast towns.....		294
	1,650	2,369
Men.....		2,666
Women.....		740
Children.....		319
Unclassified.....		294
Total.....		4,019

QUARANTINE—BOCAS DEL TORO.

Vessels inspected and passed.....	37
Crew inspected and passed.....	1,818
Passengers inspected and passed.....	1,024
Passengers, in transit, inspected and passed.....	303
Persons held to complete period of incubation of yellow fever.....	11
Persons held to complete period of incubation of bubonic plague.....	11

No quarantinable disease has appeared in this port, and the health conditions of the port and surrounding territory are good.

TABLE XIX.—STATEMENT OF QUININE ISSUED.

	Kilos.
Quinine sulphate.....	4.00
Quinine sulphate tablets.....	8.00
Total.....	12.00
Pounds avoirdupois.....	26.46

TABLE XX.--PERSONNEL REPORT.

	Officers and em- ployees.	Skilled and unskilled labor.	Total.
Chief health office.....	13	3	16
Quarantine division.....	8	30	38
Health office, Panama.....	12	149	161
Health office, Colon.....	8	102	110
Ancon Hospital.....	126	387	513
Colon Hospital.....	10	22	32
Santo Tomas Hospital.....	6		6
Palo Seco Leper Asylum.....	2	16	18
Zone Sanitation.....	6	118	124
Hospital Farm.....	1	48	49
 DISPENSARIES.			
Balboa.....	4	2	6
Corozal.....	2	2	4
Cristobal.....	3	3	6
Culebra.....	3	2	5
Empire.....	3	2	5
Gatun.....	2	2	4
Margarita Point.....	1		1
Naos Island.....	1	1	2
Paraiso.....	2	2	4
Pedro Miguel.....	2	1	3
Toro Point.....	1	1	2
Total.....	216	893	1,109













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